

21-GP1-198 Economic Impact Data Sheet

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants and businesses.

Limited economic impact on building owners, tenants, and business. The values in the table have not been updated since 2016. As of 2016, LED technology was relatively new, and the efficacy was around 82 lm/W. As of 2021, exterior LEDs are easily 105 lm/W and many exceed 120 lm/W. In 2016, light loss factors for LEDs were somewhat an unknown. As of 2021, the lighting industry's knowledge is deeper and different light loss factors are used now. These values are change in available lighting technology as well as informed design practices.

These values are slightly greater than California's Title 24 which had an economic analysis and were deemed cost effective. These values are similar to a draft addendum of ANSI/ASHRAE/IES Standard 90.1. BC Hydro funded some cost analysis for the 90.1 proposal. Other than exchange rate, the cost of lighting equipment in Canada and US is the same. BC Hydro's lighting subcontractor provided a cost analysis and cost data of the 90.1 addendum indicating that 2021 is equipment is similar cost of 2016 equipment, but the efficacy had an increased over the period of time.

This proposal is similar to other energy code changes that involved cost analyses and those cost requirements were met.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$0/square foot (For residential projects, also provide [Click here to enter text.](#)/ dwelling unit)

[Show calculations here, and list sources for costs/savings, or attach backup data pages](#)

This is a change in value in response to newer technology. The incumbent technology is more efficient than the last time the value was updated.

Provide your best estimate of the annual energy savings (or additional energy use) for your code change proposal?

0.08 kWh/ square foot (or) [Click here to enter text.](#)KBTU/ square foot

(For residential projects, also provide [Click here to enter text.](#)KWH/KBTU / dwelling unit)

[Show calculations here, and list sources for energy savings estimates, or attach backup data pages](#)

- Assumed at 30,000 square foot parking lot. The LPD reduced is reduced by 40% between the existing (0.06 W/ft²) and new value (0.037 W/ft²). The values in the table are roughly a 40% reduction across the board. Assumes 2,230 kWh saved. 2,230 kWh / 30,000 = 0.076 kWh / ft².

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

No change in enforcement, just revised values.

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.